

ABSTRACT

A method for catalytically reducing nitrogen oxide compounds (NO_x , defined as nitric oxide, NO , + nitrogen dioxide, NO_2) in a gas by a material comprising a base metal consisting essentially of CuO and Mn , and oxides of Mn , on an activated metal hydrous metal oxide support, such as $\text{HMO}:\text{Si}$. A promoter, such as tungsten oxide or molybdenum oxide, can be added and has been shown to increase conversion efficiency. This method provides good conversion of NO_x to N_2 , good selectivity, good durability, resistance to SO_2 aging and low toxicity compared with methods utilizing vanadia-based catalysts.